

AMENDMENTS TO THE CLAIMS

1. (Original) An isolated nucleic acid molecule comprising a nucleotide sequence encoding a peptide or polypeptide having LPI activity, said nucleotide sequence corresponding to a sequence being selected from the group consisting of:

- a) a nucleotide sequence comprising a part of one of the sequences as depicted in Figure 2a and 2b and identified as SEQ ID NO:2; SEQ ID NO:4; SEQ ID NO:6);
- b) nucleotide sequences encoding a peptide or polypeptide having LPI activity and having the amino acid sequence depicted in Figure 3 and identified as SEQ ID NO:3, SEQ ID NO:5 or SEQ ID NO:7;
- c) nucleotide sequences encoding a peptide or polypeptide having LPI activity and having a portion of the amino acid sequence depicted in Figure 3 identified as SEQ ID NO:3, SEQ ID NO:5 or SEQ ID NO:7;
- d) nucleotide sequences being at least 40% identical to any one of the nucleotide sequences a), b) or c);
- e) nucleotide sequences hybridizing at stringent conditions with any one of the nucleotide sequencers a), b), c) or d), and
- f) nucleotide sequences complementary to any of the nucleotide sequences a), b), c), d) or e).

2. (Original) An isolated nucleic acid molecule as claimed in claim 1, of which the part of the nucleic sequence as defined in claim 1 under a) corresponds to nucleotides 1 to 490 of Figure 2a (SEQ ID NO:2).

3. (**Currently Amended**) An isolated nucleic acid molecule as claimed in claim 1, claim 1 or 2, of which the part of the nucleotide sequence as defined in claim 1 under a) corresponds to nucleotides 41 to 490 of Figure 2a (SEQ ID NO:2).

4. (**Currently Amended**) An isolated nucleic acid molecule as claimed in claim 1, claim 1, 2 or 3, of which the part of the nucleotide sequence as defined in claim 1 under a) corresponds to nucleotides 125 to 490 of Figure 2a (SEQ ID NO:2).

5. (Original) An isolated nucleic acid molecule as claimed in claim 1, of which the part of the nucleotide sequence as defined in claim 1 under a) corresponds to nucleotides 1 to 490 of lpi-B (SEQ ID NO:4) or lpi-C (SEQ ID NO:6) in Figure 2b.

6. (Currently Amended) An isolated nucleic acid molecule as claimed in claim 1, ~~claim 1 or 2~~, of which the part of the nucleotide sequence as defined in claim 1 under a) corresponds to nucleotides 41 to 490 of lpi-B (SEQ ID NO:4) or lpi-C (SEQ ID NO:6) in Figure 2b.

7. (Currently Amended) An isolated nucleic acid molecule as claimed in claim 1, ~~claim 1, 2 or 3~~, of which the part of the nucleotide sequence as defined in claim 1 under a) corresponds to nucleotides 125 to 490 of lpi-B (SEQ ID NO:4) or lpi-C (SEQ ID NO:6) in Figure 2b.

8. (Currently Amended) An isolated nucleic acid molecule as claimed in claim 1, ~~claims 1-7~~, wherein the nucleotide sequence as defined in claim 1 under d is at least 40%, at least 50%, preferably at least 60%, or at least 70%, more preferably at least 75%, even more preferably at least 80%, most preferably at least 90% identical to any one of the nucleotide sequences a), b) or c).

9. (Currently Amended) An isolated nucleic acid molecule as claimed in claim 1, ~~claims 1-8~~, wherein the stringent conditions are conditions are constituted by overnight hybridization at 42°C in 5xSSC and washing at 65 °C 0.1xSSC.

10. (Currently Amended) An isolated nucleic acid molecule as claimed in claim 1, ~~claims 1-9~~, wherein a portion of the amino acid sequence as defined in claim 1 under c) constitutes alone or with other portions of the amino acid sequence the region(s) of the peptide or polypeptide having LPI activity that lead to biological activity.

11. (Currently Amended) An isolated nucleic acid molecule as claimed in claim 1, ~~claims 1-10~~, which nucleic acid is DNA, RNA or cDNA.

12. (Currently Amended) Recombinant vector comprising an isolated nucleic acid molecule as claimed in claim 1, ~~claims 1-11~~.

13. (Currently Amended) Method for making a recombinant vector comprising inserting at least one isolated nucleic acid molecule as claimed in claim 1 ~~claims 1-11~~ into a vector.

14. (Currently Amended) Bacteriophage comprising an isolated nucleic acid molecule as claimed in claim 1, ~~claims 1-11~~.

15. (Currently Amended) Recombinant host cell or organism comprising an isolated nucleic acid molecule as claimed in claim 1, ~~claims 1-11, a vector as claimed in claim 12 or a bacteriophage as claimed in claim 14~~.

16. (Original) A recombinant host cell as claimed in claim 15, wherein the host cell is selected from the group consisting of the bacteria *Escherichia coli*, *Bacillus subtilis*, *Staphylococcus aureus*, the yeasts *Saccharomyces cerevisiae*, *Pichia pastoris*, *Candida*, insect cells of the *Drosophila* system and the Baculovirus system, the mammalian cells monkey COS, hamster CHO, hamster BHK, hamster RBL-2H3, human 293, human 3T3, human HeLa, human U937, human HL-60, human Jurkat cells, mouse L cells.

17. (Currently Amended) Method for producing a recombinant peptide or polypeptide having LPI activity, comprising culturing a recombinant host of claim 15 ~~claim 15 or 16~~ under conditions such that said peptide or polypeptide is expressed and recovering said peptide or polypeptide.

18. (Original) Method as claimed in claim 17, wherein the host cell is an *Escherichia coli* cell.

19. (Original) Method as claimed in claim 17, wherein the host cell is a *Staphylococcus aureus* cell.

20. (Original) Method as claimed in claim 19, wherein the

Staphylococcus aureus cell is from a strain that already produces an endogenous protein having LPI activity (LPI).

21. (Currently Amended) Method for producing a synthetic peptide or polypeptide having LPI activity, comprising deducing the amino acid sequence encoded by a nucleic acid molecule as claimed in claim 1 ~~claims 1-11~~ and synthetically producing a peptide or polypeptide having the said amino acid sequence.

22. (Currently Amended) Peptide or polypeptide having LPI activity obtainable by ~~any one of~~ the ~~methods~~ method as claimed in claim 17, ~~claims 17-21~~.

23. (Original) Peptide or polypeptide as claimed in claim 22 having the amino acid sequence depicted in Figure 3 and identified as SEQ ID NO:3, SEQ ID NO:5 or SEQ ID NO:7.

24. (Currently Amended) A method of diagnosis, treatment or prevention of a disease in a subject, the method comprising administering a Peptide peptide or polypeptide as claimed in claim 22 ~~claim 22 or 23 to said subject for use in diagnosis, prophylaxis or therapy so as to diagnose, treat or prevent said disease in said subject~~.

25. (Currently Amended) A method of treating an acute or chronic inflammatory reaction in a subject, the method comprising administering a Peptide peptide or polypeptide as claimed in claim 22 ~~any one of the claims 22-24 to said subject for use in~~ the treatment of said acute and chronic inflammation inflammatory reactions reaction in said subject.

26. (Currently Amended) A method of treating a subject having a disease listed in Table 2, the method comprising administering a Peptide peptide or polypeptide as claimed in claim 22 any one of the claims 22-24 for use in to a subject for the treatment of said subject of said diseases disease in Table 2.

27. (Currently Amended) A method of producing a therapeutic preparation, the method comprising combining a Peptide peptide Use of the peptide or polypeptide as claimed in claim 22

with a suitable excipient claim 22 or 23 for the manufacture of a, wherein said therapeutic preparation is suitable for use in diagnosis, prophylaxis or therapy in a subject.

28. (Currently Amended) A method of treating an acute or chronic inflammatory reaction in a subject, the method comprising administering a peptide or polypeptide produced by the method Use as claimed in claim 27 for the treatment of said acute and or chronic inflammation inflammatory reactions reaction in said subject.

29. (Currently Amended) A method of treating a subject having a disease listed in Table 2, the method comprising administering a peptide or polypeptide produced by the method Use as claimed in claim 27 claims 27 or 28 for the treatment of said diseases disease in said subject Table 2.

30. (Currently Amended) A therapeutic composition, said composition comprising a suitable excipient and the peptide or polypeptide as claimed in claim 22 claim 22 or 23.

31. (Currently Amended) A composition as claimed in claim 30, wherein said composition is formulated for administration to a subject and useful for treating acute and/or acute and/or chronic inflammation inflammatory reactions in a subject, wherein said acute and/or chronic inflammatory reactions are as listed in Table 2.

32. (Currently Amended) A composition as claimed in claim 30, wherein said composition is formulated for administration to a subject and useful for treating a disease in a subject wherein said diseases disease is a disease listed in Table 2.

33. (Currently Amended) An antibody or biologically active fragment thereof, wherein said antibody or biologically active fragment thereof is specifically directed to the peptide or polypeptide as claimed in claim 22 claim 22 or 23.

34. (Currently Amended) An antibody as claimed in claim 33, wherein said antibody is formulated for use in diagnosis, prophylaxis or therapy in a subject.

35. (Currently Amended) An antibody as claimed in claim 33, wherein said antibody is formulated claim 33 or 34 for use in the treatment of staphylococcus infection in a subject.

36. (Currently Amended) A method of producing a therapeutic preparation, the method comprising combining Use of an antibody as claimed in claim 33 with a suitable excipient, wherein said for the manufacture of a therapeutic preparation is suitable for use in diagnosis, prophylaxis or therapy in a subject.

37. (Currently Amended) A method of treating a staphylococcus infection in a subject, the method comprising administering a therapeutic composition Use as claimed in claim 36 for the treatment of said staphylococcus infection in said subject.

38. (Original) Therapeutic composition comprising a suitable excipient and one or more antibodies as claimed in claim 33 and/or biologically active fragments thereof.

39. (Currently Amended) An isolated nucleic acid molecule as claimed in claim 1 ~~any one of the claims 1-11~~ for use in gene therapy.

40. (Original) Method for treating a subject suffering from inflammation by administering a therapeutically effective amount of a peptide or polypeptide as claimed in claim 22.

41. (Currently Amended) Method for gene therapeutically treating a subject suffering from inflammation by administering a therapeutically effective amount of a nucleic acid molecule as claimed in claim 1 ~~claims 1-11~~.

42. (Original) Method for treating a subject suffering from staphylococcus infection by administering a therapeutically effective amount of an antibody and/or biologically active fragment thereof as claimed in claim 33.

43. (Currently Amended) Method for isolating from an organism a gene encoding a protein having LPI activity, comprising screening of a genomic or cDNA library of that organism with a probe

that is capable of hybridising with the nucleic acid molecule as claimed in claim 1 ~~claims 1-11~~, isolation of the positive clones, and testing whether the positive clones show LPI activity.

44. (Original) Method for identifying nucleic acid sequences encoding a peptide or polypeptide having LPI activity, comprising comparison of the sequence as depicted in Figures 2a and 2b identified by SEQ ID NO:2, SEQ ID NO:4 or SEQ ID NO:6 with the nucleic acid or protein sequence information contained in a database and selecting sequences that are at least 60% identical to the sequences as depicted in Figures 2a and 2b and identified by SEQ ID NO:2, SEQ ID NO:4 or SEQ ID NO:6.

45. (Original) Method for identifying amino acid sequences of a peptide or polypeptide having LPI activity, comprising comparison of the sequences as depicted in Figure 3 and identified by SEQ ID NO:3, SEQ ID NO:5 or SEQ ID NO:7 with the nucleic acid or protein sequence information contained in a database and selecting sequences that are at least 40% identical to the sequences as depicted in Figure 3 and identified by SEQ ID NO:3, SEQ ID NO:5 or SEQ ID NO:7.

46. (Currently Amended) A medicament for the treatment of acute and chronic inflammatory reactions in a subject, wherein said medicament comprises a Micro-organism harboring a nucleic acid molecule as claimed in claim 1, and wherein said medicament is suitable ~~claims 1-11~~ for use ~~as a medicament for in~~ the treatment of acute and chronic ~~inflammation~~ inflammatory reactions in a subject.

47. (Currently Amended) A method of treating a subject having a disease listed in Table 2, said method comprising administering a Micro-organism as claimed in claim 43 to said subject for treating said subject for said disease listed in Table 2.

48. (Original) Method for producing peptides or polypeptides having LPI activity, comprising culturing wild-type, non-recombinant, *Staphylococcus* strains that produce endogenous priming/activation inhibitory peptides or polypeptides and recovering same.

49. (Original) Peptide or polypeptide having an amino acid sequence that is at least 40% homologous to the amino acid sequence depicted in Figure 3 (SEQ ID NO:3; SEQ ID NO:5; SEQ ID NO:7) and having at least LPI activity.

50. (**New**) Recombinant host cell or organism comprising a vector as claimed in claim 12.

51. (**New**) Recombinant host cell or organism comprising a bacteriophage as claimed in claim 14.